

GRETCHEN WHITMER

STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION LANSING

PAUL C. AJEGBA DIRECTOR

February 9, 2021

Ms. Denise Donohue, Director County Road Association of Michigan 101 South Washington Square, Unit 200 Lansing, Michigan 48933

Dear Ms. Donohue:

Local Bridge Program Deadline for Applications – May 3rd, 2021

The deadline has been extended for agencies that missed the call for applications notification to Monday May 3^{rd} , 2021.

The Michigan Department of Transportation (MDOT) is pleased to announce the solicitation of applications for candidate projects for the Local Bridge Program. Selected projects will be funded during the 2024 fiscal year (FY). Do not submit projects which cannot be committed to construction within FY 2024. The applications can be submitted by the local agency owner or their consultant. All bridge applications submitted in previous years that have not been selected for funding have been discarded. There is no limit to the number of applications from any one local agency. An agency must be able to fund ALL applications submitted for FY 2024 in that fiscal year.

The FY 2024 Local Bridge Program budget is estimated at \$50 million. This amount may be subject to revisions. We are asking the County Road Association of Michigan and the Michigan Municipal League to distribute this notice to their member agencies.

All applications are to be electronically submitted by Monday, May 3rd, 2021.

Refer to the enclosed Exhibits for information regarding eligibility and submitting candidate Local Bridge Project Applications.

If you have any questions or need further information, please contact Keith Cooper, Bridge Program Manager, at 517-331-1395 or at CooperK@Michigan.gov.

Sincerely,

Larry T. Doyle, P.E., Division Administrator Development Services Division

Enclosures

Ms. Denise Donohue Page 2 February 9, 2021

cc: Mark Lewis, FHWA
Kurt Zachary, FHWA
John LaMacchia II, MML
Matt Bach, MML
Matt Chynoweth, MDOT

Anita Boughner, MDOT Tracie Leix, MDOT Keith Cooper, MDOT MDOT, Region Engineers

MDOT, Transportation Service Managers MDOT Local Agency Program Listserv Members

Metropolitan Planning Organizations

Exhibit 1 – Bridge Definition and Application Process

Definition

To be eligible for bridge funds, the structure must meet the definition of a bridge, defined as a structure with a total clear span of more than 20 feet, measured along the centerline of the roadway over a stream, watercourse, or opening. For a span bridge, this means the clear opening span, measured face to face at the inside of the abutments, is greater than 20 feet. A multi-unit culvert is considered a bridge if the total length, as measured along the centerline of the roadway, is greater than 20 feet and the distance between the culvert units is less than half the diameter of the smallest unit. This description is referenced in item number 112 of the Michigan Structure Inventory and Appraisal Coding Guide. There are many multi-unit culverts under local agency jurisdiction that qualify as bridges and thus, are required to be on the structure inventory and regularly inspected. Please check multi-unit culverts in your area to see if they qualify under the definition of a "bridge."

Work Type

An application <u>must</u> list the specific work being applied for in the preventative maintenance and/or rehabilitation categories.

Participation Level

The preventive maintenance, structure rehabilitation and replacement, and approach construction costs may be eligible for a maximum of 95 percent participation from federal and/or state funds. The right-of-way, design engineering, and construction engineering costs are not eligible for Local Bridge Program funds.

Cost Estimates

The current Local Agency Program (LAP)—Bridge Cost Estimate Worksheet, dated 01/28/2021, which indicates per unit cost estimates of various replacement, rehabilitation, and preventive maintenance options (Exhibit 4). This information will be helpful in determining estimated construction costs for different types of repairs. All estimates for projects to be constructed in 2024 should incorporate an annual inflationary factor of three percent (3%). If the structure is over a railroad, include the railroad's flagging and construction fees.

Data Formula Points

The data found on the Structure Inventory and Appraisal (SI&A) form is used in many of the formula rating point calculations and is one item looked at by your Region Bridge Council when considering discretionary rating points. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. When completing an application, the data stated in the supporting documents must match the data found in the SI&A form.

Site Review for Bridge Applications

MDOT bridge personnel will review submitted applications for completeness and determine the preliminary (computer generated) rating points. The LAP bridge staff will perform site visits, verify appropriate scopes of work, and create written site reports. The applications, preliminary rating points, and the site visit reports will then be forwarded to the respective Region Bridge Council for their review and the addition of the discretionary rating points.

Project Estimate vs. Application Estimate

The Local Bridge Advisory Board has set a policy for projects coming in over application estimate. If, at the grade inspection stage, the project estimate exceeds the application estimate by more than twenty percent, the Region Bridge Council may review the project. The council can decide to accept the project at the increased estimate, cap the project at a percentage above the application estimate, or request an application for additional funds be submitted in the next call for projects. Due diligence must be taken in getting the most reasonable application estimates.

Bridge Application Package and Submission

Please be sure your Structure Number is correct and have your signed resolution, SI&A, Bridge Inspection Report, cost estimate, location and detour maps, project narrative, letters of support, and photos ready to include as attachments. See Exhibit 3 for further details.

Applications can be submitted electronically using the <u>Local Agency Bridge Program Website</u>, or directly at FY 2024 Local Bridge Program - Call for Applications Submission Sheet

Exhibit 2 – Bridge Scoping and Work Type Definitions

Bridge Scoping

To assist in the bridge scoping and fix selection process, refer to MDOT's Scoping Manual, specifically pages 30 through 48 of Chapter 5, Signs of Pavement & Bridge Distress and Fix Selection Guidelines.

Bridge Asset Management Plan

To assist with managing bridge inventory and developing an optimum bridge preservation strategy, a valuable resource is the <u>Asset Management Guide for Local Bridges</u> in Michigan.

All local agencies are encouraged to submit asset management plans for the bridge applications being submitted. A summary of the local agency's bridge network asset management plan may also be submitted for review.

Replacement

Replacement projects involve replacing the entire substructure, superstructure, deck and necessary approach work. If a multi-use path or sidewalk is planned but does not currently exist, the estimate needs to clearly indicate the costs of these items. If the project is selected for funding, a master plan showing the path or sidewalk must be provided for them to be considered participating in the Local Bridge Program.

The approach costs should be estimated using a minimum of \$35,000 per station, with a minimum approach cost of \$200,000. The estimate needs to account for public utilities such as water mains and sewers, which will need to be altered during construction. Also, if the structure is within a substandard horizontal or vertical alignment, the estimate must account for any possible increase in approach distance.

Replacement projects need to meet current American Association of State Highway and Transportation Officials (AASHTO) guidelines and the Load Factor Resistance Design criteria.

Rehabilitation

Rehabilitation is defined as major work required to restore the structural integrity of a bridge, as well as work necessary to correct major safety defects. These projects are required to meet AASHTO guidelines. If a rehabilitation project is over water, a scour analysis will be required during the design phase and the existing foundations will need to be shown to be stable under a scour event. A structure that is not found to be stable during a scour event may not be allowed to proceed to contract. If making the structure stable results in a change in scope, it may be necessary to re-apply during a future call for applications.

Estimated repair costs for bridge rehabilitation projects will vary by the type of work. Include publicly owned utility relocation costs. Examples of rehabilitation work eligible for funding under the program include:

- Full deck replacement (with or without painting of steel beams)
- Superstructure replacement
- Structure widening
- Removal of existing bridge without replacement

Preventive Maintenance

Preventative Maintenance applications can be a single bridge or multiple bridges submitted for similar preventive maintenance work into one application. This can include multiple agencies working together to submit one application. A multiple preventative maintenance bridge application will count as one application. The Region Bridge Councils will review a multiple structure application as one package and will not rate each structure independently. Preventive Maintenance activities are eligible under the Local Bridge Program.

When applying for a multiple bridge preventative maintenance project, submit each structure individually. For electronic submission, select "PM-Multiple Structure" as the type of work on each form. For paper submission, identify on the cover sheet that each bridge is part of a "PM-Multiple Structure" application. Examples of Preventive Maintenance include:

- Hot mix asphalt (HMA) overlay with waterproofing membrane
- Epoxy deck overlay (Concrete)
- Deck overlay (removing and replacing concrete surface above/below the top mat of steel reinforcement)
- Painting only (full, zone, or spot painting)
- Pin and hanger replacement
- Slope paving repair
- Joint replacement and repair
- Drainage system repair (bridge deck drains and bridge approach downspouts)
- Scour countermeasures
- Concrete crack sealing
- Concrete patching and repair
- Approach pavement relief joint installation
- Temporary supports
- Expansion or construction joint repair
- Guard rail beam retrofit or installation
- Substructure repairs

Exhibit 3 – Application Requirements

- 1. Submit a narrative which includes the following:
 - a. The responsible <u>local agency contacts person's name, title, e-mail, mailing address, and telephone number.</u>
 - b. Clearly indicate whether the application is for replacement, rehabilitation or preventive maintenance. For rehabilitation and preventive maintenance, clearly specify work requested for funding.
 - c. A statement explaining the economic importance of the structure.
 - d. In a short paragraph, if there is currently a detour for the structure, explain "Existing detour currently affects"
 - e. In a short paragraph, if the structure is or would be closed, explain "If the structure is closed, the detour would affect...."
 - f. If the structure is closed, what year the structure was closed.
 - g. A statement of any maintenance done on the structure either past or present.
- 2. Include the most recent Structure Inventory and Appraisal (SI&A) form and Bridge Inspection Report form (BIR). These forms must have been updated within the 24-month period, prior to April 5th, 2021. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. The SI&A and BIR forms must be updated electronically on MiBridge prior to the April 5th, 2021 deadline. Do not send in any marked-up forms as we cannot update the data for you.
- 3. Submit a legible map (8 ½" X 11") showing:
 - a. Emergency facilities such as fire stations, hospitals or police stations.
 - b. Schools and other significant traffic generating facilities.
 - c. The alternate routes or detours which must be used because of load limits or closures.
- 4. For all applications, include a minimum of two photographs of the following:
 - a. One showing the structure's alignment.
 - b. One showing the structure's profile view.
 - c. If the bridge is posted, include one photograph of the bridge clearly showing the current posting sign.
- 5. For **rehabilitation** and **preventive maintenance** applications, also include photographs of the following:
 - a. The deck showing the areas of delamination and patches.
 - b. The substructure units showing areas of delamination's/spalls.
 - c. The beams showing areas of cracks and delamination for concrete and local areas of corrosion and/or local failure for steel.

6. Submit a breakdown of the estimated replacement, rehabilitation, and preventive maintenance as follows:

A.	Approach Construction	(A) \$	
B.	Structure Construction	(B) \$	
	Total (A & B)	Total \$	

Note: Use the attached Cost Estimate Worksheet to calculate the approach and structure construction costs.

- 7. Submit a **"Priority List"** listing all the structures that you want rated.
- 8. **For each application**, submit a current resolution, signed, and dated, from the governing board supporting the project. Resolutions from previous applications will not be accepted. Any application not containing a signed resolution for all applications will be considered incomplete and will be rejected. Letters of local support are recommended but are not mandatory.
- 9. Any application that is not complete will be rejected. Common examples of incomplete applications are those that are missing updated SI&A forms, photos of postings, load ratings, missing resolutions, and priority lists. All completed applications must be submitted by the April 5th, 2021 deadline.
- 10. All local agencies are encouraged to submit asset management plans for the applications being submitted. A summary of the local agencies bridge network asset management plan may also be submitted for review. Refer to the Asset Management Guide for Local Agency Bridges in Michigan, located on MDOT's Local Agency Bridge Program's website.
- 11. Previous years' applications have been discarded. The Region Bridge Councils and the Local Bridge Advisory Board will only review applications submitted during the current call for applications. After the applications have been reviewed and projects have been selected for funding, all non-funded bridge applications will be discarded.

Submit Applications:

By E-mail:

Fill out form at the link below and attach application (One application per sheet).

Application conversion to pdf is preferred over scanned applications due to file size.

FY 2024 Local Bridge Program - Call for Applications Submission Sheet

Questions: Contact Rita Levine at (517) 335-4528 or Keith Cooper at (517) 331-1395.

Exhibit 4 - Cost Estimating Worksheet

OWNER: REGION:	FISO	CAL YEAR:	RIDGE COST ESTIMATE WOR - CPM, REHAB, REPLACE		Curb to Curb WIDTH	DATE: ENGINEER:	REV. 01/28/2021 2/1/2021
TSC:	PR:	MP:	LENGTH	WIDIH	WIDTH	STRUCTURE ID: BRIDGE ID:	
PRIMARY WORK ACTIVIT OTHER WORK	Υ	Over	DECK AREA: CLEAR ROADWAY:		SFT SFT	STR. TYPE:	
WORK AC	<u> </u>		ne Design Manual on design standards and hydraulic requirements)	QUANTITY	<u>UNIT</u>	UNIT COST	TOTAL
Single or Multiple Spans, (· · · · · · · · · · · · · · · · · · ·	•	pproach, MOT)		SFT	\$235.00 /SFT	
Single Span, Over Water Multiple Spans, Over Water			pproach, MOT) pproach, MOT)		SFT SFT	\$350.00 /SFT \$300.00 /SFT	
Precast Culvert		•	pproach, MOT)		SFT	\$350.00 /SFT	
NEW SUPERSTRUCTURE							
New Superstructure, Grad	•		deck/super; add MOT & approach)		SFT	\$195.00 /SFT	
New Superstructure, Over	vvater	(inci. remove exist	deck/super; add MOT & approach)		SFT	\$230.00 /SFT	
WIDENING Structure Widening,	ft	(incl. deck/super/su	b widening, add approach transition)		SFT	\$350.00 /SFT	
	<u>. It </u>	(IIIci. deck/supei/st	b widerling, add approach transition)		<u> </u>	φ330.00//3Ε1	
NEW DECK New Bridge Deck & Barrie	r	(incl. remove exist	deck/railing, add approach, MOT)		SFT	\$85.00 /SFT	
DEMOLITION		(mon romovo oxiot	accivitating, and approach, we ry		<u> </u>	ψοσ.σσ /στ τ	
Entire Structure, Grade Se	paration				SFT	\$38.00 /SFT	
Entire Structure, Over Wa	•				SFT	\$46.00 /SFT	
DECK REPAIR / TREATMENTS							
Bridge Railing Replaceme		(incl. removal and i	•		FT	\$460.00 /FT	
Concrete Brush Block / Cu Concrete Barrier Patch	rb Patch	(incl. hand chipping (incl. hand chipping			FT SFT	\$24.00 /FT \$70.00 /SFT	
Concrete Deck Patch		(incl. hand chipping			SFT	\$40.00 /SFT	
Deep Overlay		(incl. joint repl & hy	· · · · · · · · · · · · · · · · · · ·		SFT	\$37.00 /SFT	
Epoxy Overlay	-1	(incl. warranty)			SYD	\$30.00 /SYD	
Expansion Joint Gland Re Expansion Joint Replacem		(remove and replace (incl. removal)	e elastomeric gland)		FT FT	\$115.00 /FT \$700.00 /FT	
Full Depth Patch	ioni	(moi. removal)			SFT	\$77.00 /SFT	
Healer / Sealer		(penetrates cracks	in bridge deck)		SYD	\$15.00 /SYD	
HMA Overlay with WP me Overlay Removal	mbrane	(Enoxy: \$22/syd II	atex: \$26/syd HMA: \$7/syd)		SYD SYD	\$60.00 /SYD \$22.00 /SYD	
Reseal Bridge Joints		(Εροχ y. φ22/ 5yu L	atex. \$20/5yu FilviA. \$7/5yu)		FT	\$18.00 /FT	
Shallow Overlay		(incl. joint repl & hy	dro)		SFT	\$35.00 /SFT	
SUPERSTRUCTURE REPAIR							
Bearing Realignment / Re	olacement	(incl. temporary su			EA	\$5,100.00 EA	
Heat Straightening		(incl. clean and coa	·		EA	\$45,000.00 EA	
Pack Rust Repair Paint - Complete		(greater than 3/8" s (incl. clean & coat)	eparation)		FT SFT	\$550.00 /FT \$30.00 /SFT	
Paint - Complete Paint - Partial / Spot / Zone		(incl. clean & coat	\$20k minimum)		SFT	\$60.00 /SFT	
PCI Beam End Blockout		(incl. temporary sup	,		EA	\$7,200.00 EA	
Pin & Hanger Replacemen	t	(incl. temporary su	• •		EA	\$10,000.00 EA	
Structural Steel Repair Structural Steel Repa	r - Stiffener	(based on 6ft repai			EA EA	\$3,000.00 EA \$1,200.00 EA	
·	1 - Ouncher	(includes each side	of bearing		LA	ψ1,200.00 ΕΑ	
SUBSTRUCTURE REPAIR Substructure Patching		(measured x 2) rer	place if repair area > 30%		CFT	\$300.00 /CFT	
Substructure Replacemen	t	(incl. temporary su			CFT	\$335.00 /CFT	
Substructure Horizontal Su	ırface Sealer				SYD	\$75.00 /SYD	
Temporary Supports		(add Structural Ste	el Repair - Stiffener for ea steel beam)		EA	\$2,500.00 EA	
MISCELLANEOUS Articulating Concrete Block	(System (ACB)			ı	CVD	\$200 00 /SVD	
Articulating Concrete Bloc Concrete Surface Coating	A System (ACB)				SYD SYD	\$200.00 /SYD \$28.00 /SYD	
Culvert Cleanout					FT	\$125.00 /FT	
Epoxy Crack Injection		(structural crack re	· .		FT	\$70.00 /FT	
Metal Mesh Panels Pressure Relief Joint		(48" width, max 6'-	6" length) h concrete roadway exceeds 1,000ft)		SFT FT	\$26.00 /SFT \$110.00 /FT	
Riprap			nce around perimeter of substructure)		SYD	\$213.00 /SYD	
Silane Treatment			for concrete surfaces)		SFT	\$7.00 /SFT	
Slope Protection Repairs					SYD	\$100.00 /SYD	
Other							
				STRUCTU	RE CONSTI	RUCTION BUDGET	\$
ROAD WORK							
Approach Pavement, 12" I	RC		curb, gutter, guardrail) 20' ea. end		SYD	\$180.00 /SYD	
Approach Curb & Gutter Guardrail Anchorage to Br	idae	(incl. removal) 20' (each quadrant)	ea. quadrant		FT EA	\$56.00 /FT \$1,900.00 /EA	
Guardrail Guardrail	i Gy C		Ooft beyond reference line		FT	\$30.00 /FT	
Guardrail Terminal		(each quadrant)	·		EA	\$2,600.00 /EA	
Roadway Approach Work		(beyond approach	pavement)		LSUM	LSUM	
Utilities			T		LSUM	LSUM	
TRAFFIC CONTROL Part Width Construction	Unit Cost to be dete	rmined by Region or TSC	। rattic & Satety	ı	LSUM	LSUM	
Part Width Construction Crossovers					EA	\$300,000.00 /EA	
Temporary Traffic Signals					set	\$25,000.00 /set	
RR Flagging					LSUM	LSUM	
Detour					LSUM	LSUM	
				OAD/TDAE		RUCTION BUDGET	<u> </u>
			RELATED R	OAD/TRAFI	-IC CONSTI	KOCTION BODGET	Φ
CONTINGENCY	(10% - 20%) (use h	igher contingency for sma		OAD/TRAFI	%	\$0.00	
CONTINGENCY MOBILIZATION INFLATION	(estimate at 10%)	igher contingency for sma					\$(\$(\$(\$)